UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,173	08/25/2003	Chang-Hung Lee	5234-0170PUS1	4453

2292 7590 08/02/2007	EXAMINER
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ART UNIT	PAPER NUMBER
2155	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/648,173	LEE ET AL.
	Examiner	Art Unit	
	Kevin Bates	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>13 April 2007</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-37</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-37</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This Office Action is in response to a communication made on March 8, 2007.

Claims 24 – 37 have been newly added.

Claims 1-37 are pending in the application.

Applicant's request for reconsideration of the finality of the rejection of the phone

interview is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 35 - 37 rejected under 35 U.S.C. 102(b) as being anticipated by

Norris (5557749).

Regarding claim 35, Norris teaches a data processing method for data

processing system, the data processing system communicating with a plurality of data

processing systems and having a look up table for storing a plurality of records relative

to compressing methods used respectively and previously between the data processing

system (Column 5, lines 54 – 60), the method comprising: a target data processing

system is recorded in a record of the look up table (Column 5, lines 29 – 31; the routing

table); transmitting an inquiring signal to the target data processing system if there is no

record corresponding to the target data processing system in the look up table (Column

5, lines 18 – 21); receiving a response signal from the data processing system (Column

5, lines 21 – 26); performing a data process on a transmitting data according to the

response signal (Column 5, lines 26 – 31); and recording the data process and a device

identification number of the target data processing system in the look up table (Column

5, lines 29 – 31).

Regarding claim 36, Norris teaches the data processing method of claim 35, the

method further comprising: if a compressing method corresponding to the target data

processing system is recorded in the look up table, compressing the transmitting data

with the data compressing procedure (Column 5, lines 54 – 60).

Regarding claim 37, Norris teaches the data processing method of claim 35,

wherein the response signal comprises information about whether to proceed data

compressing or not and a corresponding compressing method (Column 5, lines 32 –

42).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Engwer (6947483) in view of Norris(5557749).

Regarding claims 1 and 24, Engwer teaches a data processing system applying in a wireless local areas network (WLAN) (Column 1, lines 20 – 24), the WLAN comprising a plurality of data receiving/transmitting apparatus (Column 4, lines 16 – 20), the system at least being set up in a first data receiving/transmitting apparatus to let the first data receiving/transmitting apparatus proceed the received or transmitting data (Column 4, lines 42 – 45; lines 50 – 55), the system comprising:

a transmitting device for processing the transmitting data transmitted to a second data receiving/transmitting apparatus (Column 4, lines 50 – 55), the transmitting device comprising:

a control module for determining a corresponding data compressing policy before the transmitting data being transmitted to the second data receiving/transmitting apparatus (Column 5, lines 55 – 59); and

a data compressing module for compressing the transmitting data according to a data compressing method which is assigned by the control module (Column 7, lines 13 – 15); and

a receiving device for processing a receiving data, the receiving device comprising:

an identity module for identifying the data compressing method of the received data (Column 7, lines 7 – 12); and

a data decompressing module for decompressing the received data according to the data compressing method which is identified by the identity module (Column 7, lines 7 – 12).

Engwer does not explicitly indicate a look up table, when the data processing

system transmitting data to the plurality of data receiving/transmitting apparatus, for

recording the data compressing method and the identification number corresponding to

each of the plurality of data receiving/transmitting apparatus; and where the control

module determines compressing policy according to the record of the second data

receiving/transmitting apparatus in the look up table.

Norris teaches a network that compresses packets between sender and receiver

(Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a

compression method between a sender and a receiver (Column 5, lines 19 – 26),

storing the negotiated compression method in a look-up or routing table (Column 5,

lines 29 – 31), and consulting the routing table when forwarding packets in order to

determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Norris' teaching of a destination table including compression

capabilities in Engwer's WLAN in order to allow the transmission control module to

improve the performance by negotiating compression methods once, then maintaining

that information for future transmissions.

Regarding claim 12, Engwer teaches a data processing method of wireless

local areas network (WLAN) (Column 1, lines 20 – 24), the WLAN comprises pluralities

of data receiving/transmitting apparatus (Column 4, lines 16 – 20), the processing

method processes a transmitting data at least in one data receiving/transmitting

apparatus, for following up with transmitting the transmitting data to a target data

receiving/transmitting apparatus of the WLAN (Column 4, lines 42 – 45; lines 50 – 55)

the data processing method comprises;

determining a corresponding data compressing policy according to the record of

the target data receiving/transmitting apparatus before the transmitting data being

transmitted to the target data receiving/transmitting apparatus (Column 5, lines 55 – 59);

and

compressing the transmitting data according to a data compressing method

recorded in the data compressing policy (Column 7, lines 13 – 15).

Engwer does not explicitly indicate the data receiving/transmitting apparatus

comprises a look up table, the look up table comprising a plurality of data records for

recording the data compressing method and the identification number corresponding to

each of the plurality of data receiving/transmitting apparatus when the data processing

system transmitting data to the plurality of data receiving/transmitting apparatus,

Norris teaches a network that compresses packets between sender and receiver

(Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a

compression method between a sender and a receiver (Column 5, lines 19 – 26),

storing the negotiated compression method in a look-up or routing table (Column 5,

lines 29 – 31), and consulting the routing table when forwarding packets in order to

determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Norris' teaching of a destination table including compression

capabilities in Engwer's WLAN in order to allow the transmission control module to

improve the performance by negotiating compression methods once, then maintaining

that information for future transmissions.

Regarding claims 2, 14, and 25, Engwer teaches the data processing system of

claims 1, 12, and 24, wherein the data compressing policy comprises:

if the data compressing method used by the second data receiving/transmitting

apparatus is known, the control module notifying the data compressing module to

compress the data according to the data compressing method recorded in the look up

table (Column 12, lines 9 – 18); and

if the data compressing method used by the second data receiving/transmitting

apparatus is not known, the control module determining a process to negotiate with the

second data receiving/transmitting apparatus by a predetermined inquiring procedure

(Column 6, line 66 – Column 7, line 4).

Engwer does not explicitly indicate that the apparatus uses a look up table to

determine whether the apparatus knows if the second apparatus can use compression.

Norris teaching a routing table that includes the information of whether a

compression method has been negotiated between the sender and a receiver (Column

5, lines 53 – 65)

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Norris' teaching of a destination table including compression

capabilities in Engwer's WLAN in order to allow the transmission control module to

improve the performance by negotiating compression methods once, then maintaining

that information for future transmissions.

Regarding claims 3, 15, and 26, Engwer teaches the data processing system of

claims 2, 14, and 25, wherein the inquiring procedure comprises; transmitting an

inquiring signal to the second data receiving/transmitting apparatus (Column 6, line 66 –

Column 7, line 4); waiting for a response signal responded by the second data

receiving/transmitting apparatus (Column 7, lines 12 – 15); and proceeding a

predetermined responding processing procedure in a predetermined waiting period, for

following up with transmitting the data (Column 7, lines 12 – 15, where the AP sends out

the test packet to the MU and operates as the MU cannot handle the compressed data

unless a response packet in a compressed format is received).

Regarding claims 4, 16, and 27, Engwer teaches the data processing system of

claims 3, 15, and 26, wherein the response signal comprises following responding

information: whether the transmitting data should be compressed; and the data

compressing method being used when the transmitting data should be compressed

(Column 7, lines 12 – 15, where the AP sends out the test packet to the MU and

operates as the MU cannot handle the compressed data unless a response packet in a

compressed format is received).

Regarding claims 5, 17, and 28, Engwer teaches the data processing system of

claims 4, 15, and 27, wherein the responding processing procedure comprises: if

receiving the response signal in the predetermined waiting period, then processing the

transmitting data according to the responding information of the response signal; and if

not receiving the response signal in the predetermined waiting period, then directly

transmitting the transmitting data without compressing (Column 7, lines 12 – 15, where

the AP sends out the test packet to the MU and operates as the MU cannot handle the

compressed data unless a response packet in a compressed format is received).

Regarding claims 6, 18, and 29, Engwer teaches the data processing system of

claims 5, 17, and 28, wherein, when the responding information of the response signal

shows unnecessary to proceed the data compression, the control module notifies the

data compressing module not to proceed the compressing procedure, and transmits the

transmitting data directly (Column 7, lines 12 – 15, where the AP sends out the test

packet to the MU and operates as the MU cannot handle the compressed data unless a

response packet in a compressed format is received).

Regarding claims 7, 19, and 30, Engwer teaches the data processing system of

claims 5, 17, and 28, wherein, when the responding information of the response signal

(Column 7, lines 12 – 15) shows necessary to proceed the data compression, the

apparatus creates a record of the MU's ability to compress data and its compression

scheme (Column 12, lines 9 – 17).

Engwer does not explicitly indicate the look up table creates a data record to

record the device identification number of the second data receiving/transmitting

apparatus, the information of data compression, and the information of the

corresponding data compressing method into the look up table.

Norris teaches a network that compresses packets between sender and receiver

(Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a

compression method between a sender and a receiver (Column 5, lines 19 – 26),

storing the negotiated compression method in a look-up or routing table (Column 5,

lines 29 – 31), and consulting the routing table when forwarding packets in order to determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claims 8, 20, and 31, Engwer teaches the data processing system of claims 5, 17, and 28, wherein, when the responding information of the response signal shows unnecessary to proceed the data compression, a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of unnecessarily proceeding data compression (Column 12, lines 9 – 17, where the AP keeps track of each MU and whether they have shown no compression abilities).

Engwer does not explicitly indicate the look up table creates a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of data compression, and the information of the corresponding data compressing method into the look up table.

Norris teaches a network that compresses packets between sender and receiver (Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a compression method between a sender and a receiver (Column 5, lines 19 – 26), storing the negotiated compression method in a look-up or routing table (Column 5,

lines 29 – 31), and consulting the routing table when forwarding packets in order to determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Norris' teaching of a destination table including compression capabilities in Engwer's WLAN in order to allow the transmission control module to improve the performance by negotiating compression methods once, then maintaining that information for future transmissions.

Regarding claims 9, 21, and 32, Engwer teaches the data processing system of claims 5, 17, and 28, wherein, if not receiving the responding data in the predetermined waiting period (Column 7, lines 12 – 15, where the AP sends a test packet to inform the MU that it can handle compressed packets, after that the AP assumes the MU cannot handle compressed packets until a response in a compressed format is received from the MU), the apparatus creates a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of unnecessarily proceeding data compression (Column 12, lines 9 – 17, where the AP keeps track of each MU and whether they have shown no compression abilities).

Engwer does not explicitly indicate the look up table creates a data record to record the device identification number of the second data receiving/transmitting apparatus, the information of data compression, and the information of the corresponding data compressing method into the look up table.

Norris teaches a network that compresses packets between sender and receiver (Column 4, line 65 – Column 5, line 2). Norris teaching further includes negotiating a

compression method between a sender and a receiver (Column 5, lines 19 – 26),

storing the negotiated compression method in a look-up or routing table (Column 5,

lines 29 – 31), and consulting the routing table when forwarding packets in order to

determine the supported compression methods (Column 5, lines 54 – 60).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Norris' teaching of a destination table including compression

capabilities in Engwer's WLAN in order to allow the transmission control module to

improve the performance by negotiating compression methods once, then maintaining

that information for future transmissions.

Regarding claims 10, 22, and 33, Engwer teaches the data processing system

of claims 1, 12, and 24, the data compressing method is to compress the transmitting

data during performing the data packet packaging procedure (Column 7, lines 7 – 12).

Regarding claims 11, 23, and 34, Engwer teaches the data processing system

of claims 10, 22, and 33.

Engwer does not explicitly indicate wherein the data compressing method is to

proceed the loss-less compression with the transmitting data by the data compressing

method of ZIP or LZH.

Norris teaches that the LAN compression method can be ZIP (Column 2, line 24)

or LZH (Column 1, lines 35 – 37).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Norris' lossless compression methods in Engwer's teaching

in order to use well known in the art compression methods that LAN devices and WLAN devices are likely to support.

Regarding claim 13, Engwer teaches the data processing method of claim 12, wherein the transmitting data comprises a header and a main data (Column 7, lines 7 – 10).

Response to Arguments

Applicant's arguments with respect to claims 1-37 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin Bates
July 17, 2007

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER